

PHENIX WEEKLY PLANNING

6/26/2008

Don Lynch

Design & Safety Review Action Items:

Mu Trigger
 RPC Prototype Installation
 New Beampipe
 CM Crane
 Sta. 1 and MMN Scaffolding

Platform review (Pearson)
 In progress
 Waiting for Funding
 Waiting for Vendor response
 Inspect after Complete (Pearson)

RPC Factory:

Prototype C tests
 Prototype D Tests
 Dark Current test stand

in progress
 gaps & module frames received
 in design

Mu Trigger FEE upgrade:

Station 2/3 scaffolding
 Station 1 scaffolding
 Rack components (N&S)
 Rack assembly
 LV cable prep
 N&S platforms Fabricate & install

complete, needs inspection
 in progress finish by 6/27
 on order
 in progress finish by 7/11
 in progress finish by 7/15
 fabrication in progress, install by 8/15 (Pearson)

Mu Trigger FEE Upgrade (cont'd):

Prep work for platforms (water/elec)	in progress finish by 7/15
FEE installation N&S sta's. 1,2 & 3	Aug-Sep
FEE water and dry air installation	Aug-Sep
Optical cable prep	July
LV cable installation	July-Aug
optical cable installation	July- Aug
Rack (N&S) installation	July 15+
Install FEE's in MMS for RPC test	Sep.
Install FEE South platform	Sep.
Install S rack cooling & electric	Oct.
Rack room electronics, etc.	Sep.- Oct.
Final rack utilities	Sep.-Oct
Testing	Sep.-Nov.
RPC engineering & safety review	July 10&11
RPC proptotype installation:	
Prep work	complete by July 31
move (7) MuID pipes	
move gap 5 south cable tray	
Rack prep	Complete by Aug 29
RPC prototype gas system	July - Aug

RPC proptotype installation (cont'd):

Move shielding for installation	July - Sep
RPC prototype cable routing & support	July - Aug
Modify crystal palace & vapor barrier	July - Aug
RPC prototype install	Sep. - Oct.
(RPC2 - PHENIX) (RPC3 - C. Pearson)	Sep. - Oct.
Install rack in tunnel south	Sep.
Replace tunnel shielding	Nov. (C. Pearson)
Connect electronics/gas	Sep. - Nov.
MuTr Decapacitations (Sta. 1 N and MMN)	July - Sep
Fan Tray maintenance	in progress (on going fill-in)
HBD Install	Sep.-Oct.
PC1 west work (needs planning)	Sep. - Nov.
CM Crane Install	Oct.
DC East?/West Repairs	Oct. - Nov.

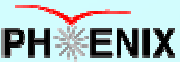
Shutdown '08 Schedule, cont'd

Remove all inst'n equipment(e.g. scaffolds)
Gap 5 north piping and cable tray re-loc.
Gap 2 north cable tray & crate re-mounts
Prep for shutdown 2009
Prep for run 9
Close shield wall start shifts
Start physics

Oct. - Nov
Oct. - Dec.
Oct. - Dec
Nov. - Dec
Dec
Dec.
Jan 1



Shutdown '08 Electrician Work



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- 1) Run Power to new MuTrgr FEE racks on MMN and MMS - *Final design of the reworked North Muon Power Distribution System is set. Nearly all material acquired without cost. Paul is m revising the One-Line electrical drawing. CAD approval required...maybe by next week. Effort should take ~ 1 week. Then the new MuTrigger North power cable can be installed to the rack location, preferably after the rack platform is installed... The power for the South Trigger Rack(s) to be taken from an existing (spare) breaker in the Muon Tracker power panel. This should take less than 1 day to install.*
- 2) Install power and signal cable tray (ceiling suspended) for new DCM rack row - north of existing DCM racks. - *on Hold until new floor plan is determined*
- 3) Install power feeds to RPC north & south tunnel racks from IR power panels. - *Plan is to run the cables from the IR to the North tunnel rack locations. The south RPC rack power can be taken from the existing (spare) breakers in the SMI power panel located on the IR south west wall. These cable runs may take a few days to complete due to new power tray runs required into the tunnel areas.*
- 4) Assist in signal and LV cable installation for MuTr/RPC upgrades as necessary.
- 5) Upgrade power capacity of Central Magnet power distribution for future bridge rack loads.
 - a) Remove existing 15KVA transformer and install 45KVA unit.
 - b) Install new (larger size) power cable from rack room to Central Magnet distribution breaker panels.

- *This job is on hold. No new racks in CM this year.*
- 6) Install 120 volt AC power drops into new control room annunciator alarm rack (rack room).

MuTrigger FEE LV Cable and Racm Prep in progress

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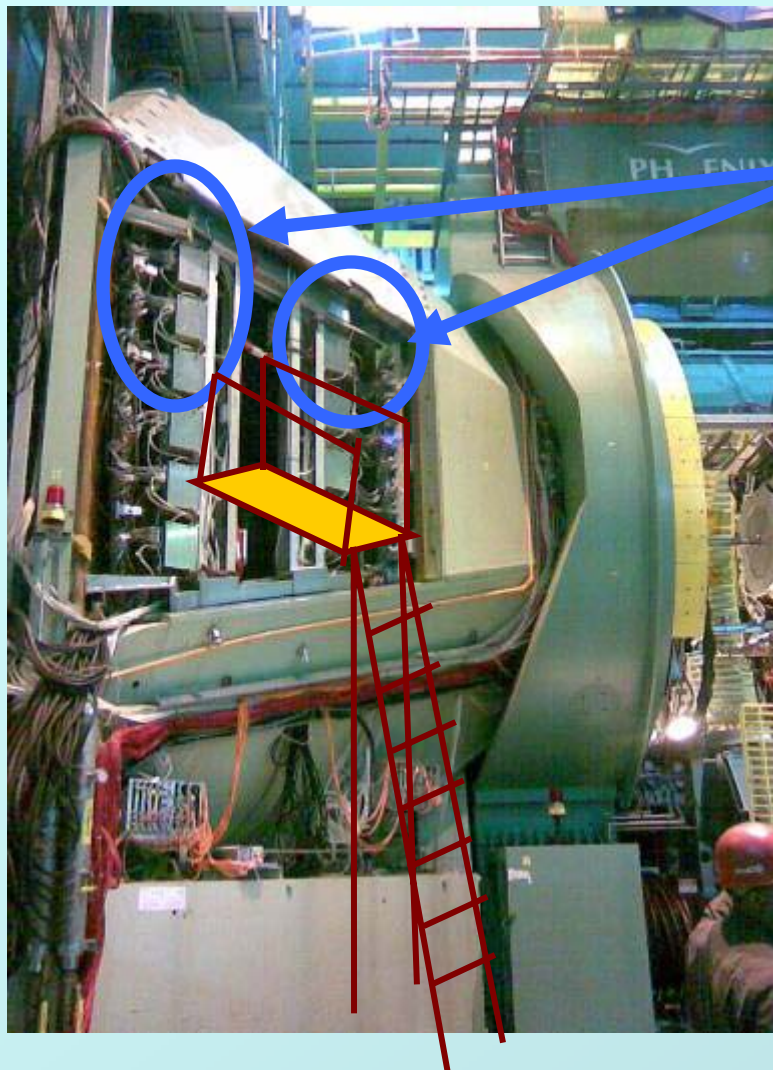
MuTrigger FEE Rack Utilities

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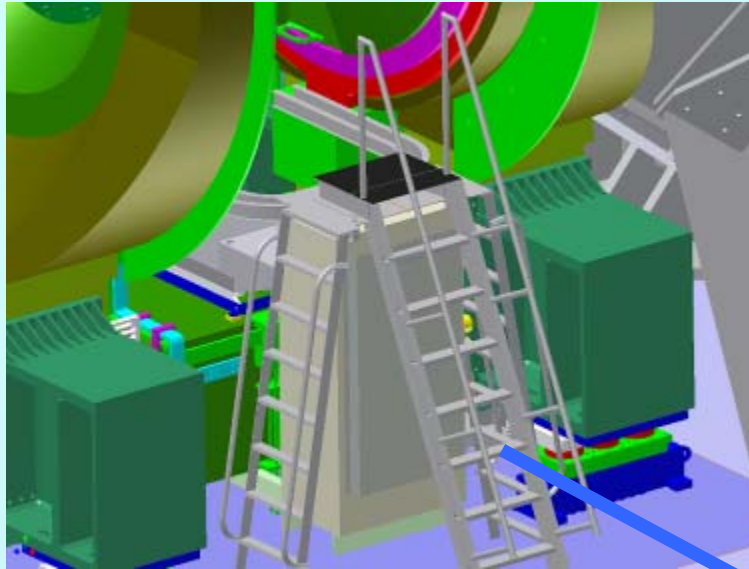
Need to install Tee's on supply and return lines: both s/b $\frac{3}{4}$ to supply Mu Trigger North rack and future rack

MuTrigger FEE upgrades in MMS in support of RPC prototypes



To match absorber and prototype RPC's, we need to install new FEE upgrades in these 5 MuTR FEE's

We will develop a plan to access these for installation and testing from a custom work platform (to be designed).



Nothing new this week.

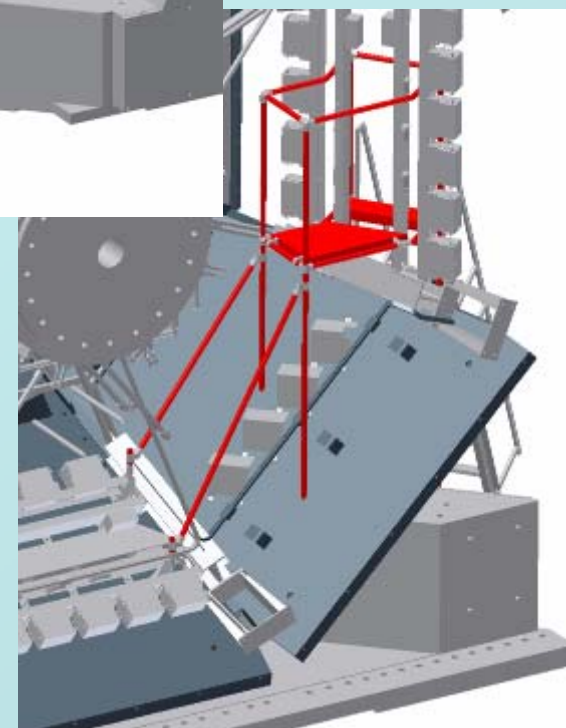
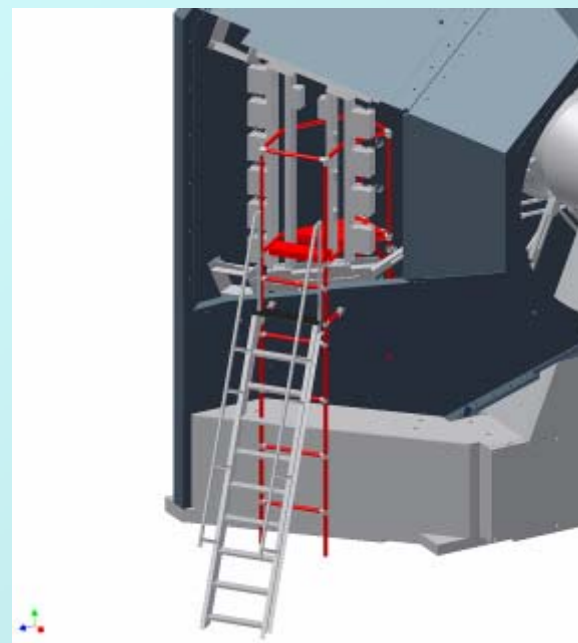
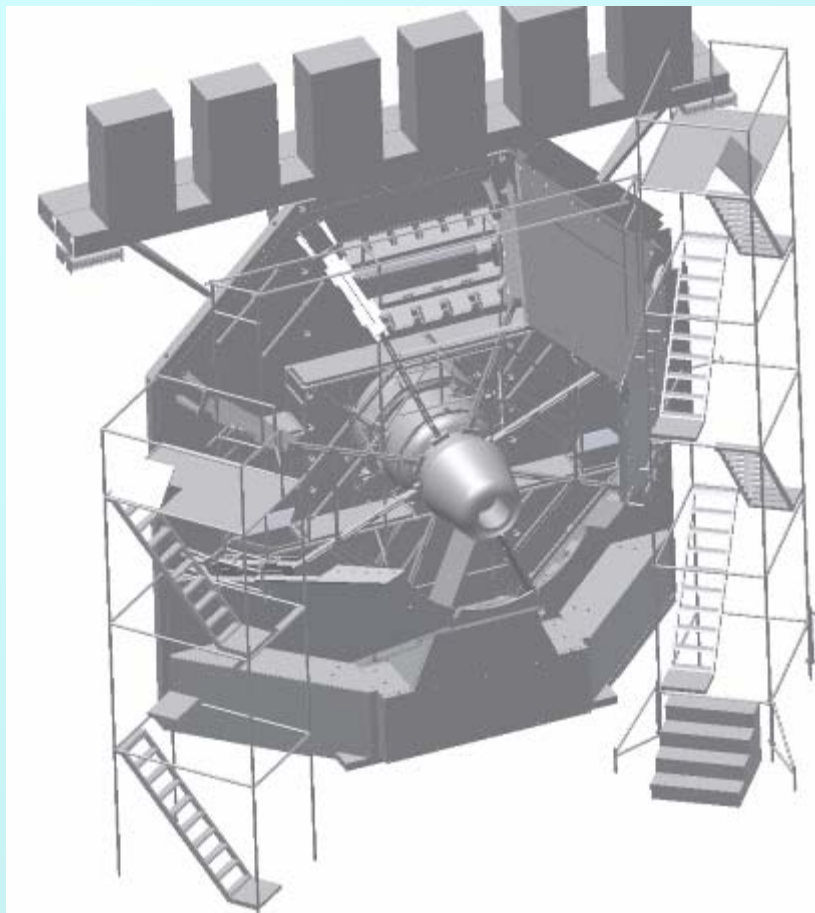
Main stairs have been drafted into Station 1 scaffolding



MMS Scaffolding & Access for This year FEE's in MMS



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6/26/08

RPC Factory Support

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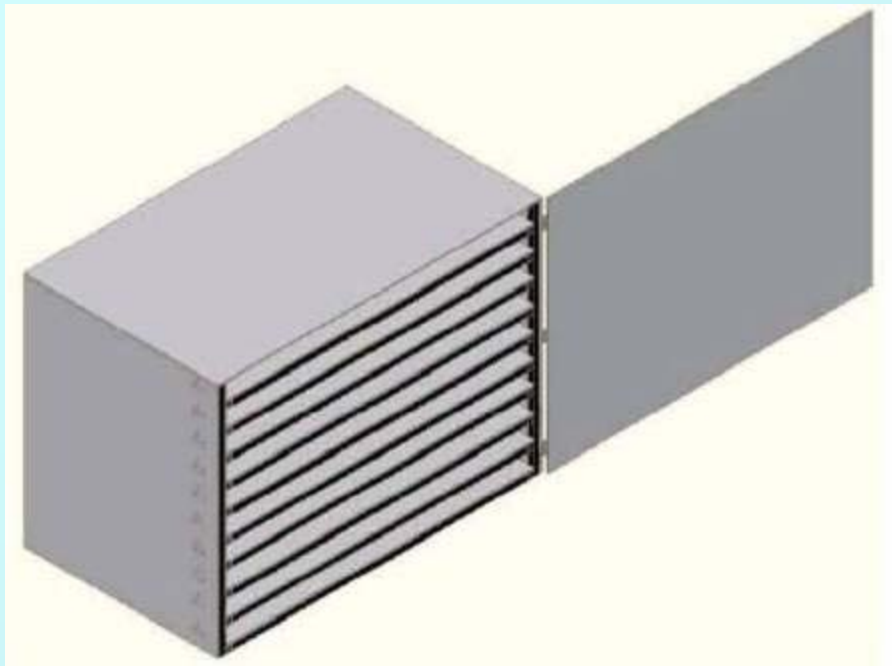
Gap/Module Storage
shelves/Humidifier



Prototype D Module Gaps
being prepared for test

RPC Factory Support, cont.

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Dark Current Test Stand

Specs:

Chamber gas flow (?)

HV supply 10,000 V

Hold time 72 hrs

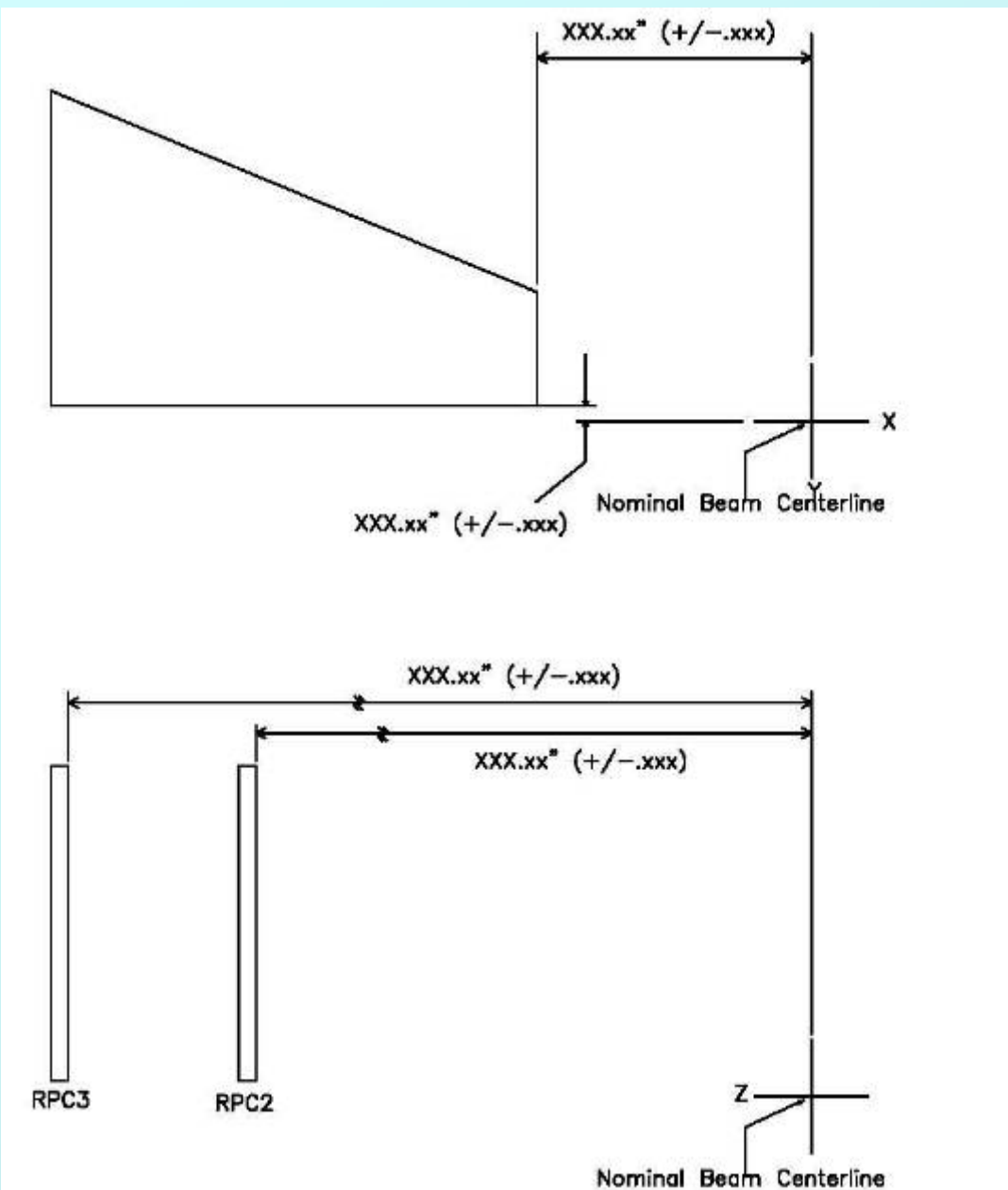
10 shelves each to hold a
76" x 50" (approx. max.)

Gap module.

Trip points $< 20 \mu\text{A}$

Current $< 1 \mu\text{A}$

Shelf surface: flat and
non-conductive

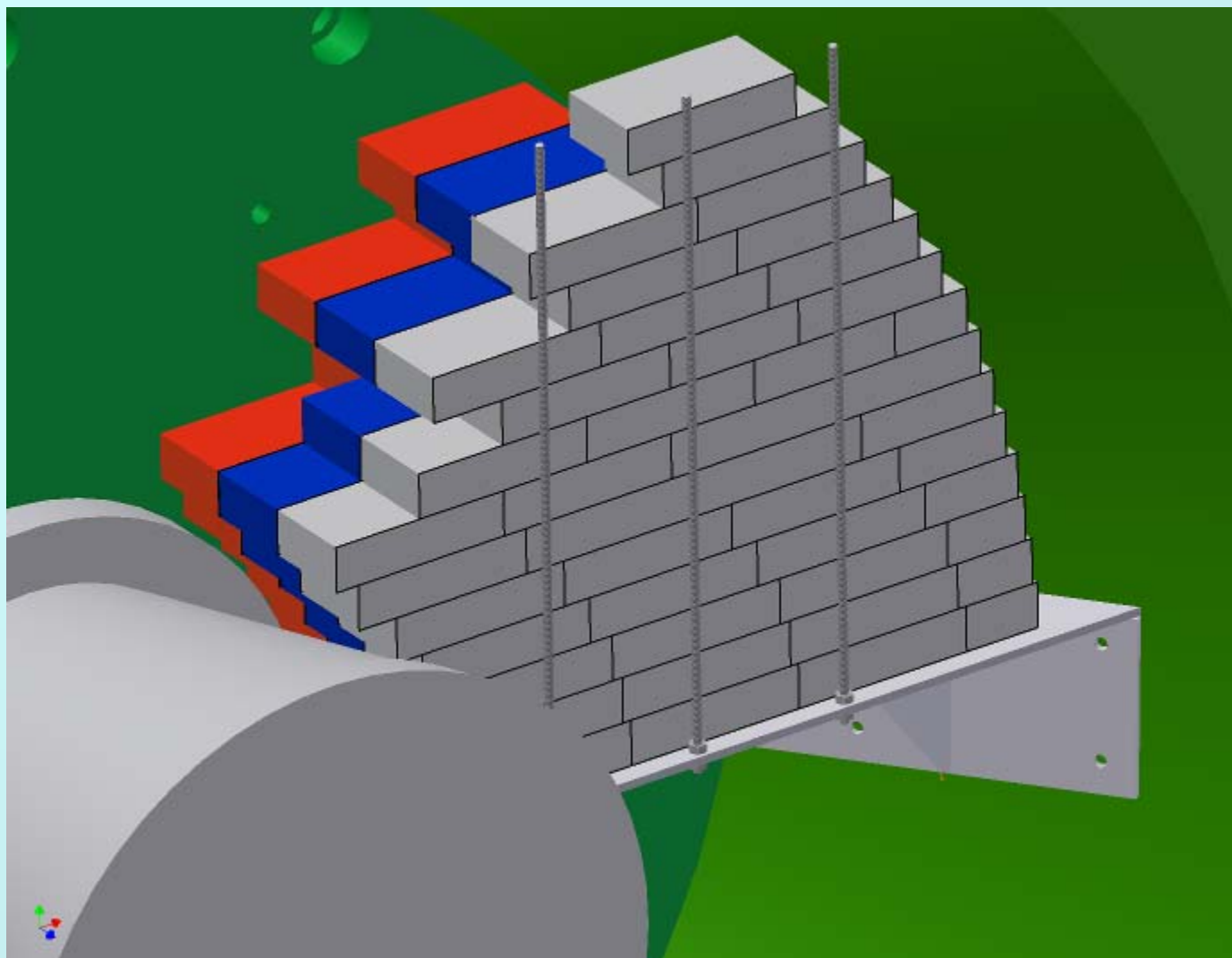


RPC Prototype Installation

RPC Prototype
Installation dimensions
needed:

1. Coarse dimensions to external structure faces for initial installation
2. Precise dimensions to external survey markers (to be applied during assembly by BNL surveyors to allow precision alignment adjustments with BNL survey in tunnel.
3. (Note: Final RPC's should include assembly fixturing for precision location of external survey markers.)

RPC Absorber Concept



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Proposed Agenda for RPC Review July 10,11

July 10

8:30--12:30
and

8:30—8:45

8:45—9:15

9:15—10:25

10:25—10:45

10:45—11:15

11:15—11:30

11:30—11:50

11:50—12:10

12:10—12:30

12:30—1:30

1:30--3:00

3:00—3:30

3:30—3:50

3:50—4:10

4:10—5:00

5:00—5:50

Engineering Review of MuTrigger RPCs: Fabrication, Installation

Integration: 1008 Conference Room

Overview

Matthias Perdekamp UIUC

RPC Design

Ralf Seidl RBRC

RPC Installation

Larry Bartoszek UIUC

RPC Assembly

Rusty Towell Abilene

Coffee and Discussion

Bakelite Procurement

Ken Barish Riverside

RPC Gap Production

Kyong Sei Lee Korea

RPC Box Hardware

Xiaomei Li CIAE

RPC Q&A

Young Jin Kim UIUC

Lunch

MuTrigger RPC Safety Review

Presenters: Steve Boose, Rob Pisani, Paul Gianotti

CA-D Experiment Safety Committee

Coffee and Discussion

RPC FEE

Cheng-Yi Chi Columbia

Trigger Electronics

John Lajoie ISU

Schedule

Matthias Perdekamp IUC

Budget & Manpower

John Hill ISU

July 11

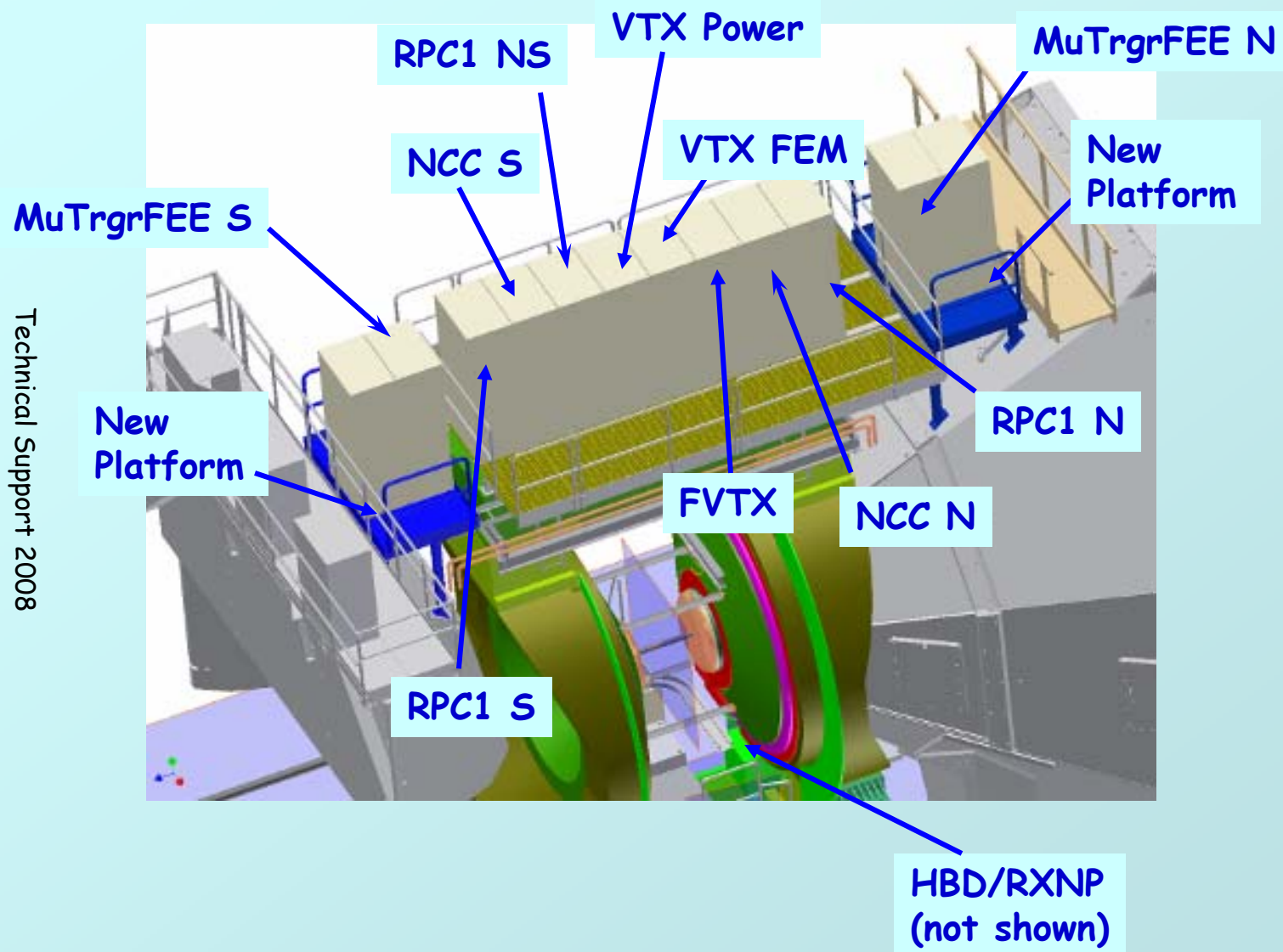
9:00—12:00

9:00—12:00

Follow Up Engineering Issues : 1008 Conference Room

Follow Up Cost, Schedule and Technical : Room 2-160 Physics

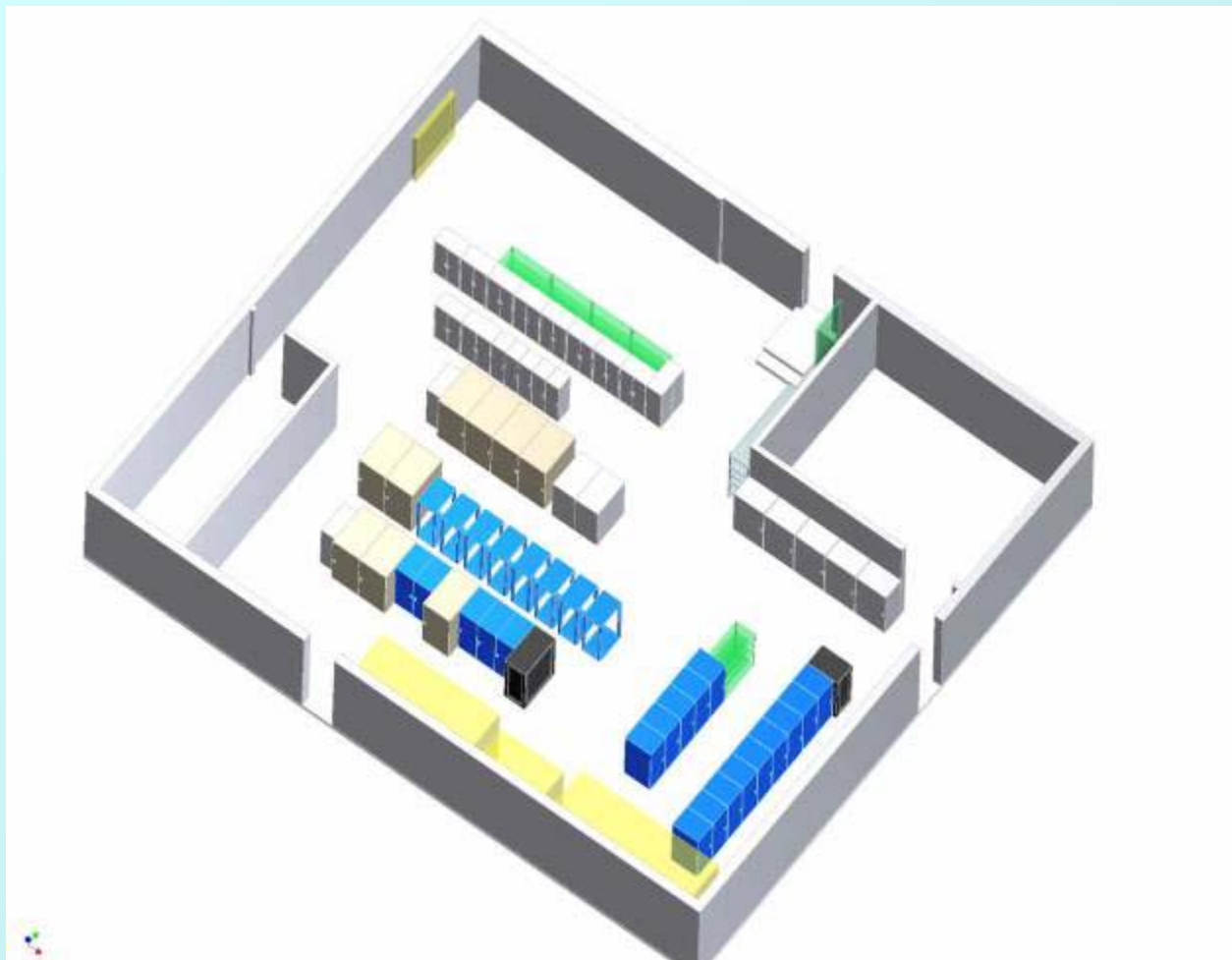
Detector upgrade Rack allotments



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Rack Room Reorganization

Inventor model in progress

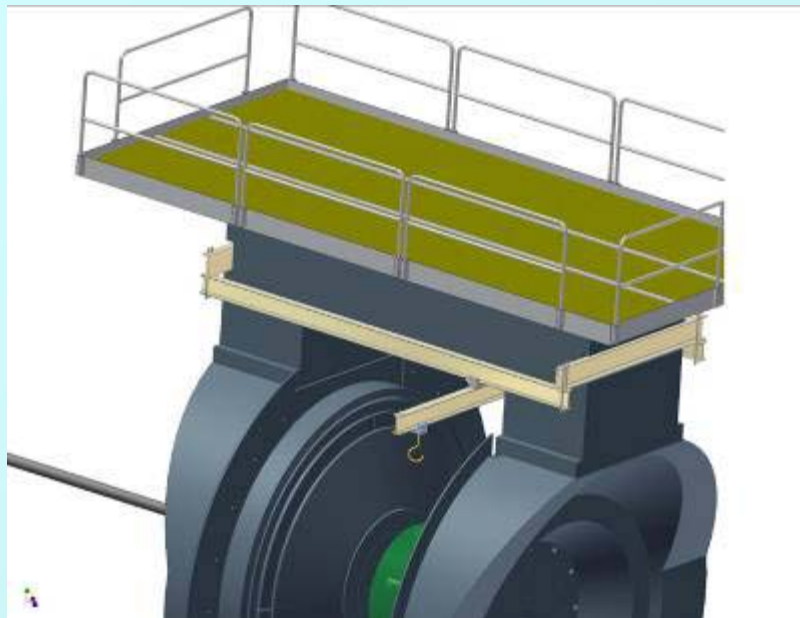


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**Fan Tray Maintenance
in progress**

CM Crane, Station 1 scaffolding



Response from Vendor
(The Bartholomew Co.
local distributor for
GORBEL) received.
Sent to CA safety
for review.

CM Crane procurement postponed
Until FY09

Safety, Security, etc.

1. ISO 14001 and 18001 review - passed.
2. CAD Safety modified confined space requirements for NMM access: above removed lampshades: no confined space requirements. Below this level confined space training is required. 2 person rule always applies.
3. Laura Biscemi from HP surveyed north and south tunnels for RPC installation. A path is to be established for working where TLD's will not be required during shutdown. During run maintenance periods all tunnel areas will still require TLD's and Rad worker 1 training.
4. Training updates for PHENIX technical staff.
Required RW training removed from some. Other Required changed to optional.

Everyone up to date on JTA's except
Carter (Haz Waste)
& Paul (Contracts, CPR & Haz Com)

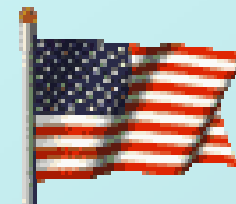
Most up to date on Required Courses. If RW is
Required please take before start of next run.

Questions- see me.



Where To Find PHENIX Engineering Info

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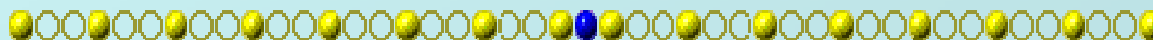


*No Planning Meeting next
week due to 4th of July
Holidays*

*Those taking Vacaton Days:
Enjoy !!*



Links for the weekly planning meeting slides, long term planning, pictures, videos
and other technical info can be found on the web site:



http://www.phenix.bnl.gov/WWW/INTEGRATION/ME&Integration/DRL_SSint-page.htm